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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,362	11/13/2003	Gregory P. Muldowney	03031 US	1443

7590 08/09/2005

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Suite 1300
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Wilmington, DE 19899

EXAMINER

SHAKERI, HADI

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,362

Applicant(s)

MULDOWNEY, GREGORY P.

Examiner

Hadi Shakeri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 051105.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION***Claim Rejections - 35 USC § 102***

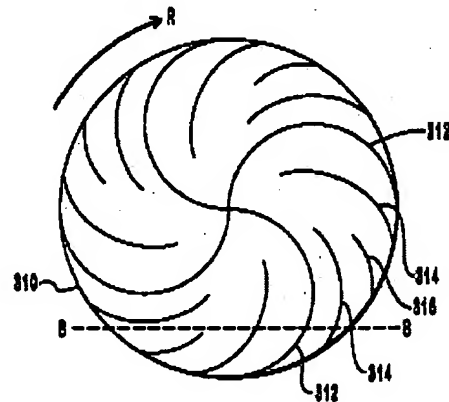
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al. (5,990,012).

Robinson et al. discloses all of the limitations of claims 1, 6 and 9, i.e., a polishing system and method utilizing a polishing pad (310) having a central region, an outer peripheral edge and a generally annular polishing region defined by an inner periphery adjacent the central region and an outer periphery spaced apart, having a first plurality of grooves or channels, (either 312, or the longer ones of 314) and a second plurality of grooves (either the longer or the shorter ones of 314), wherein the first set of grooves have a first end in the central region and a second end within the polishing region and a first end of each of the second set is located within the polishing region and the second end at the edge and/or outer periphery of the polishing region (depending on how the pad is used, e.g., by a carrier transversing the entire radius or partially), wherein the second end of the first plurality of grooves is radially inward of the outer peripheral edge and radially outward of the rotational axis.



Regarding claims 2-4 and 6-10, Robinson et al. meets the limitations, e.g., alternative arrangement; third set of grooves (316) entirely within the polishing region; pad rotating which would inherently meet the language of claims 7-9; polishing delivery system (inherent).

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Claim Rejections - 35 USC § 103

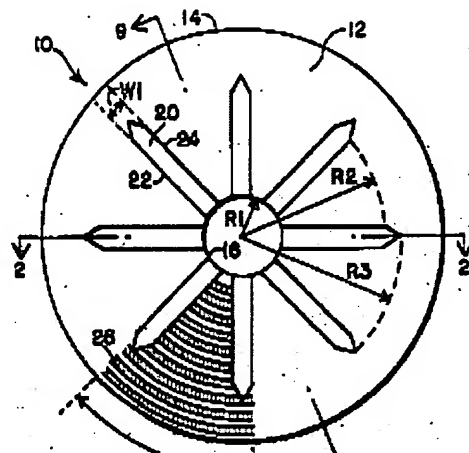
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. in view of Burke et al. (5,645,469).

Robinson et al. meets all of the limitations of claim 5, as indicated above, except for a plurality of sets of branching grooves.

Burke et al. teaches radial grooves for distribution of slurry on the polishing surface of the pad including a plurality of sets of branching grooves (26) connecting the radial grooves. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of Robinson et al. with the branching sets as taught by Burke et al. to enhance the slurry distribution.

**Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-4 and 6-9 are rejected under the judicially created doctrine of double patenting over claims 1-10 of U. S. Patent No. 6,843,711 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is anticipated in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: polishing pad with an annular polishing having first and second plurality of grooves. Note that the language regarding, "central region", outer and inner periphery not including limitations to positively limit or set these boundaries are met by a pad wherein its entire surface may be used for polishing.

7. Claim 5 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,843,711 in view of Burke et al. Burke et al. teaches a plurality of branching grooves and modifying the above US Patent in view of Burke to enhance the circulation of slurry would meet the limitations of claim 5.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

9. Applicant's arguments filed 05/11/05 have been fully considered but they are not persuasive.

The argument that Robinson does not disclose a first plurality of grooves having a second end that is radially inward of the outer peripheral edge is not persuasive. Robinson in Fig. 13 discloses a first grooves (512-516) that have a second end "not terminating at the peripheral edge" and a set of second grooves (either one of the other sets not labeled by 512-516) that meet the limitations, and secondly the embodiment as shown in Fig. 7, also meets the limitation since the second end of the first set of grooves is "radially inward of the outer peripheral edge", it may be terminating at it but still reads over the limitations to be radially inward, i.e., it does not extend beyond it.

The argument regarding double patenting against Muldowney is not persuasive since, the embodiment, e.g., in Fig. 4B reads over the claims.

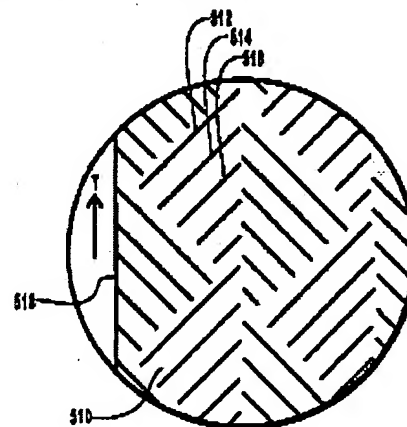
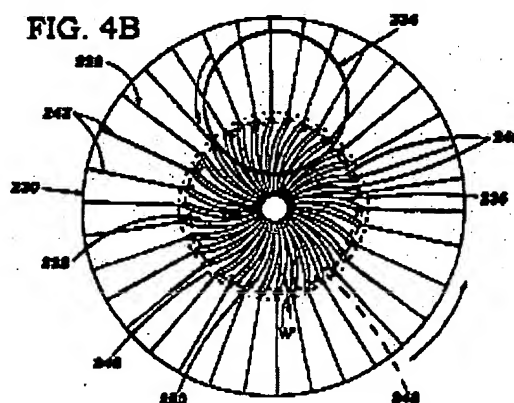


FIG. 13

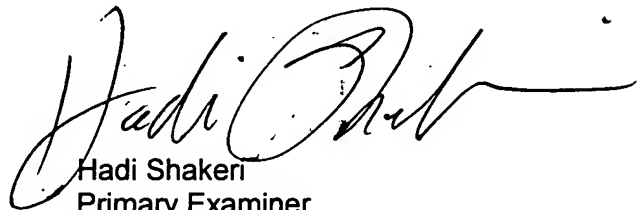


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is 571-272-4495. The examiner can normally be reached on Monday-Thursday.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in dark ink, appearing to read 'Hadi Shakeri', with a long horizontal flourish extending to the right.

Hadi Shakeri
Primary Examiner
Art Unit 3723
August 4, 2005